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REMARKS

In the Official Action mailed 22 March 2004, the Examiner reviewed claims 1-15. The Examiner objected to the Abstract; rejected claims 1, 4-7, 10-12, 14 and 15 under 35 U.S.C. §102(a); rejected claim 9 under 35 U.S.C. §103(a); and rejected claims 2, 3, 8 and 13 under 35 U.S.C. §103(a).

Applicant has amended the Abstract, and claims 1, 2, 11, 12 and 13. Claims 1-15 remain pending. The Examiner's objection and rejections are respectfully traversed below.

Objection to the Abstract

The Examiner objected to the Abstract as too long. Applicant has submitted a new Abstract. Reconsideration of the objection is requested in view of the new Abstract.

Rejection of Claims 1, 4-7, 10-12, 14 and 15 under 35 U.S.C. §102(a)

Claims 1, 4-7, 10-12, 14 and 15 are rejected under 35 U.S.C. §102(a) as being anticipated by Manning et al. (US 6,088,578). Applicant has amended independent claims 1, 11 and 12, as set forth above.

Manning et al. does not include at least the following elements of claim 1, as amended: a resource monitor within the subscriber terminal, for receiving information concerning the traffic loading of predetermined elements of the wireless telecommunications system, and for applying predetermined criteria based on that information to determine how long the uplink communication channel may be acquired for by the subscriber terminal for its own use before causing the subscriber controller to release the uplink communication channel for use by other subscriber terminals, arranged so that the subscriber terminal is allowed to acquire the uplink communication channel for a longer period than that required to send an individual data packet, but is prevented from keeping the uplink communication channel acquired indefinitely.

The amendment to claim 1 clarifies that the resource monitor is within the subscriber terminal, and the corresponding amendment to claim 12 clarifies that the relevant steps are performed at the subscriber terminal.

Manning et al. concerns High Speed Data (HSD) systems wherein a mobile station is arranged to operate on a single (fundamental) channel, but in certain situations is able to request additional (supplemental) channels for a data burst (see column 3, lines 3 to 7). To seek to

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acquire some additional channels, the mobile station sends a request to the base station for the use of supplemental channels in addition to the single channel presently being used (see column 4, lines 18 to 21). The request from the mobile station includes certain attributes of the burst of data to be transmitted, such as the total size, and also identifies the maximum number of channels that the mobile station is capable of supporting and a preferred duration for the transfer. Using this information, the base station then determines a number of supplementary channels to allocate to that mobile station (see column 4, lines 14 to 58).

From the above comments, and indeed as is clear from a reading of Manning et al. in its entirety, it is assumed that the mobile station always has one single channel permanently allocated to it, this channel not being shared with any other mobile stations.

Accordingly, it is clear that in Manning et al. the subscriber terminal (which the Examiner is considering analogous to the mobile station in Manning et al.) does not have a subscriber controller arranged, "when a data packet is to be transmitted to the data link, to acquire an uplink communication channel from the group to enable that data packet to be transmitted via the central terminal to the data link", since, considering the group of channels that are provided for transmission of data in Manning et al., the mobile station always has one of those channels permanently provided for that purpose. The Examiner has referred to column 3, lines 3 to 9, and column 4, lines 14 to 24, as disclosing this feature, but as has already been discussed previously, these sections only concern the requesting of additional supplemental channels used to speed up the transfer when in HSD mode. These additional channels do not need to be acquired to enable the data to be transferred, since the mobile station already has a dedicated channel for that purpose. Instead they merely serve to accelerate the transfer process when in HSD mode.

With regard to the resource monitor as defined in claim 1, it should be noted that it is now clarified that this resource monitor is within the subscriber terminal, and the determination made by that resource monitor as to how long the uplink communication channel may be acquired for by the subscriber terminal is made such that the subscriber terminal "is allowed to acquire the uplink communication channel for a longer period than that required to send an individual data packet, but is prevented from keeping the uplink communication channel acquired indefinitely." The Examiner has referred to column 4, lines 14 to 58, and column 3, lines 15 to 29, of Manning et al. as disclosing the features of the resource monitor. Dealing first with column 4, lines 14 to 58, it is clear that the decision as to how many supplemental channels

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to allocate to the mobile station is made at the base station (see column 4, lines 25 to 31). Accordingly, it is clear that this logic is different than the resource monitor of the present invention which is provided within the subscriber terminal.

Further, as mentioned earlier, the logic provided at the base station is not used to determine allocation of the basic uplink communication channel required to enable the data packet to be transmitted, since that channel is already in place at the time the request is made. Instead, the logic provided at the base station is merely used to deal with the optional allocation of supplemental channels in order to enable the data transfer speed to be increased. The optional nature of this activity is for example emphasised at column 4, lines 50 to 52, where it is said that if the base station does not have enough resources to grant the request for additional channels, a denial may be sent or the request may be ignored. Clearly in the present invention, where the uplink communication channel seeking to be acquired by the subscriber controller is required to enable the data packet to be transmitted, there is no possibility of the request being ignored, as that would result in faulty operation of the wireless telecommunications system.

Turning now to the disclosure at column 3, lines 15 to 29, it is clear that this paragraph is not discussing the HSD system of the invention disclosed in Manning et al., but rather is merely commenting on the previously proposed system (also mentioned briefly in the background section of the patent application of Manning et al. in column 1). In accordance with that previously proposed system, the mobile station would merely request to transmit a burst of data, with parameters in the request not being specified by the mobile station. Hence, in contrast to the invention described in Manning et al., that request would not identify the size of the burst, the preferred duration, etc. Then, in this previous system, if the traffic in the cell was low enough to permit the mobile station to be given additional traffic channels, the base station would merely inform the mobile station which channels could be used and for how long those channels could be used in addition to the channel presently assigned to the mobile station (see column 3, lines 21 to 26).

Hence, it should again be noted that the base station is making this determination, rather than a resource monitor within the subscriber terminal as defined in the amended claim 1. Further, it should be noted that the determination made by the base station only relates to the additional channels, and provides no information concerning for how long the single fundamental channel required by the subscriber station to enable data to be transmitted should be acquired. Finally, it should be noted that this section, which, as mentioned previously, deals with

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the approach used prior to the invention in Manning et al., is provided to show the contrast between that system and the approach taken in Manning et al. In the approach taken in Manning et al., the mobile station provides details about the data transfer in its request, which enables the base station to allocate additional channels for a specific period of time that is just sufficient to allow the identified data to be transmitted, this being very clear from the description of Figures 2 and 6, etc. There is no disclosure of the base station allowing the subscriber terminal to keep those additional channels acquired any longer than required to actually send the currently identified data, and, accordingly, it is clear that the determination made by the base station does not allow the subscriber terminal to acquire the uplink communication channel for a longer period than that required to send an individual data packet, as now clearly stated in the amended claim 1.

Accordingly, it is submitted that claim 1 as amended is clearly novel over the teaching of Manning et al. Given the similar amendments also introduced into independent claims 11 and 12, it is submitted that these claims are also novel for the same reason. Claims 4-7 and 10 depend from claim 1, and are allowable for at least the same reasons as claim 1, and because of the unique combinations recited. Claim 14 and 15 depend from claim 12, and are allowable for at least the same reasons as claim 12, and because of the unique combinations recited.

Accordingly, reconsideration of the rejection of claims 1, 4-7, 10-12, 14 and 15 is respectfully requested in view of the amendment.

Rejection of Claim 9 under 35 U.S.C. §103(a)

Claim 9 is rejected under 35 U.S.C. §103(a) as being unpatentable over Manning et al. (US 6,088,578). Claim 9 depends from claim 1, as amended, and is allowable for at least the same reasons as claim 1, and because of the unique combination recited.

Accordingly, reconsideration of rejected claim 9 is respectfully requested.

Rejection of Claims 2, 3, 8 and 13 under 35 U.S.C. §103(a)

Claims 2, 3, 8 and 13 are rejected under 35 U.S.C. §103(a) as being unpatentable over Manning et al. (US 6,088,578) in view of Chakrabarti et al. (US 6,678,281). Claims 2 and 13 have been amended, in light of corresponding changes to their respective base claims, which incorporate the limitation previously explicit in claims 2 and 13, that the resource monitor be within the subscriber terminal.

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The Examiner has mistakenly referred to column 8, lines 18 to 41 of Chakrabarti et al. as disclosing all of the additional features of claim 2. However, the cited section refers to element 112 and to Figure 3 of Chakrabarti et al. Element 112 is not within the mobile station. Rather, element 112 is a "serving GPRS support node SGSN," and not part of the Chakrabarti et al. mobile station MS (elements 10, 20 of Fig. 1 of Chakrabarti et al.). Accordingly, Chakrabarti does not teach the provision of a resource monitor within the subscriber terminal.

Therefore, as Claims 2, 3 and 8 depend from claim 1 as amended, they are allowable for at least the same reasons as claim 1, and because of the unique combinations recited. Claim 13 depends from claim 12 as amended, and is allowable for at least the same reasons as claim 13, and because of the unique combinations recited.

Accordingly, reconsideration of rejected claims 2, 3, 8 and 13, as amended, is respectfully requested.

CONCLUSION

It is submitted that this application is now in condition for allowance, and such action is respectfully requested.

The Commissioner is hereby authorized to charge any fee determined to be due in connection with this communication, or credit any overpayment, to our Deposit Account No. 50-0869 (ASPN 1000-1).

Respectfully submitted,

Dated: Blake, Of

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